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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,085	03/21/2002	Gunter Wermeister	029777-06	6103

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EXAMINER

WALSH, BRIAN D

ART UNIT PAPER NUMBER

3722

DATE MAILED: 04/16/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,085

Applicant(s)WERMEISTER ET AL. *cd***Examiner**

Brian D. Walsh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-27 and 29-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-27 and 29-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 18 – 27 and 29 – 38 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 18 and 31 disclose that “each of the raised corner regions including a relief face extending to a respective side face to form a raised cutting edge at a transition thereof.” The specification states on page 12 (lines 13 – 17 of the marked up copy): “A cutting edge part 5 is formed by the transition between each side face and the non-raised portion of the upper face 2. A cutting edge part 6 is formed by the transition between each side face 4 and a respective top face 8a. A cutting edge part 7 is formed by the transition between each side face 4 and a respective transitional face 16. This covers each cutting edge part (5, 6, 7) and does not mention a “relief face.” With side faces, top faces, top and bottom surfaces, cutting edges, upper faces and transitional faces, it is impossible to determine what is intended by the unlabeled and

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unmentioned "relief face" claimed by Applicant and, therefore, one of ordinary skill in the art would be unable to make and use the invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 18 – 27 and 29 – 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 18 and 31 are rejected under second paragraph for the reasons set forth above. The invention is vague and indefinite due to the lack of understanding of what exactly is meant by "relief face." The Examiner acknowledges that the specification mentions numerous surfaces can combine to make up "relief surfaces" (page 13, lines 12 – 17, marked up copy), but again from this a "relief face" cannot be gleaned.

In claim 19, Applicant asserts that the relief face is defined by a top face, parallel to the non-raised portion of the respective upper and lower face.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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3. Claims 18 – 22 and 29 – 39 are rejected, as best understood, under 35 U.S.C. 102(e) as being anticipated by Satran et al. (U.S. Pat. No. 6,053,672, “Satran” hereinafter).

Regarding claims 18 and 31, Satran discloses cutting insert comprising a generally cuboidal body having substantially upper (3) and lower (4) faces, four rake faces (5AA, 9AA, etc.) wherein the upper face (3) includes four corner regions including two diagonally opposed corner regions that are raised (10A, 10B) with respect to the remainder of the upper face. The remainder of the upper face includes a center region (2 and 3 in figure 1) and the two other corner regions (generally at 7B and 8A in figure 1). Satran discloses each of the raised corner regions includes a relief face (generally at 19, 20 in figure 4) extending to a respective side face to form a cutting edge (17, 20) at a transition thereof.

Regarding claim 19, Satran discloses each corner region includes a top face arranged substantially parallel to a remaining non-raised portion of the respective upper and lower face (see figures 3 and 4).

Regarding claim 20, Satran discloses a cutting edge (21) that is not raised with respect to the upper surface of the insert and meets at a corner of a side face and the top surface.

Regarding claim 21, Satran discloses a transitional face with a transitional cutting edge (19), interconnecting the raised and non-raised portions.

Regarding claim 22, Satran discloses the corner regions have generally the same structure and layout on both sides of each corner region. See figures 1 – 4.

Regarding claim 29, Satran discloses the cutting insert is reversible (clear in the drawings).

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Regarding claim 30, Satran shows in figures 3 and 4 that the side faces converge toward the lower face.

Regarding claims 32 and 39, Satran discloses a mounting pocket on the milling tool including a pocket for the milling tool which has at least first, second and third side walls arranged in a mutually perpendicular configuration similar to the instant invention (see figure 13) and an opening for receiving the cutting insert.

Regarding claim 33, Satran discloses a disc milling cutter having an end face and a peripheral surface, the seats disposed in an edge defined by an intersection between the two said surface (see figures 19 and 23).

Regarding claim 34, it appears that at least some of the seats are equally distanced from one another.

Regarding claims 35 and 36, if element 27B is interpreted to be an end face, some of the inserts are situated at 'end faces' disposed opposite from one another, and still intersecting the periphery of the tool, also equidistantly spaced.

Regarding claims 37 – 39, Satran discloses the inserts (1) are intended to be positioned so as provide the active cutting edges to overlap each other in successive cuts, the active cutting edges being positioned at the radially outermost and axially outermost corner of the insert (when positioned in the tool). See figures 18, 19 and 23. (Col. 2, lines 23 – 35, 52 – 64 and col. 3, lines 6 – 21).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 23 – 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satran (U.S. Pat. No. 6,053,672) in view of Hessman et al. (U.S. Pat. No. 5,032,049).

Satran discloses all of the elements as set forth in the above rejections, however, Satran fails to disclose mirror symmetry relating to the diagonals of the insert.

Hessman discloses, as is clear in all the drawings, that an insert with raised corner features that has mirror symmetry about diagonal lines of a cutting insert.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the insert of Satran to have the symmetrical features as taught by Hessman since Hessman teaches the symmetry in order to provide an indexable insert that provides maximum length in life (col. 1, lines 32 – 38).

Response to Arguments

5. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection, necessitated by amendment.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Faxing of Responses to Office Actions (UPDATED)

7. In order to reduce pendency and avoid potential delays, TC 3700 is encouraging FAXing of responses to **ALL OFFICE ACTIONS** directly into the Group at **(703) 872-9306**. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the Examiner and art unit at the top of your cover sheet. Papers submitted via FAX into TC 3700 will be promptly forwarded to the Examiner.

PLEASE NOTE: the **fax number in the above paragraph has changed**. It is to be used for all responses, **including after-final communications**.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Walsh whose telephone number is (703) 605-0638. The examiner can normally be reached on Monday - Friday 8:30 A.M. to 6:00 P.M., with every-other Friday off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (703) 308-2159.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

Br

BDW

March 23, 2004


A. L. WELLINGTON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700